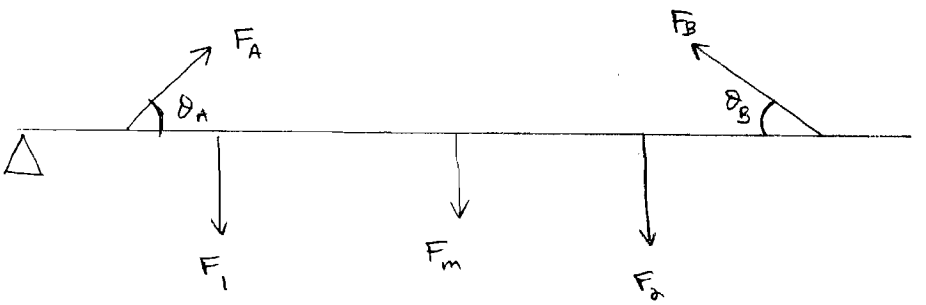
Table 3

Symbol	Forces (include signs) + or − (N)	Lever Arm (L_x) on each force (m)	Torque about zero end + or − (N·m)
F_A			①
F_B			②
θ_A			
θ_B			
$F_1 = m_1 g$			③
$F_2 = m_2 g$			④
$F_m = mg$			⑤



a) $\sum F_x = F_A \cos\theta_A - F_B \cos\theta_B =$? N

b) $\sum F_y = F_A \sin\theta_A + F_B \sin\theta_B + F_1 + F_2 + F_m =$? N

c) $\sum \tau = \underbrace{(F_A \sin\theta_A) L_A}_{①} + \underbrace{(F_B \sin\theta_B) L_B}_{②} + \underbrace{F_1 L_1}_{③} + \underbrace{F_2 L_2}_{④} + \underbrace{F_m L_m}_{⑤} =$? N·m

* Remember to consider the signs of the forces, and signs of the torques.

Show all work on back.

Box answers.